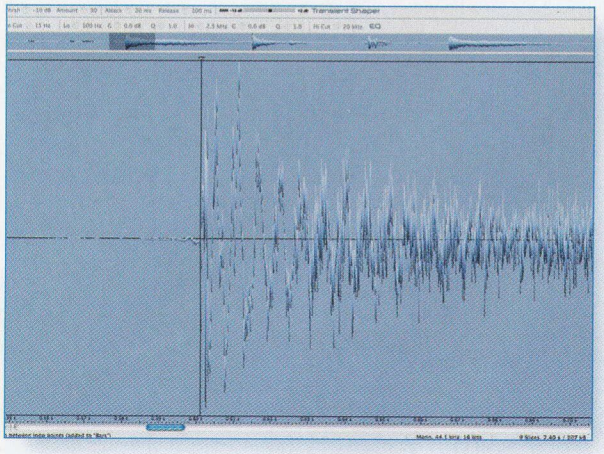
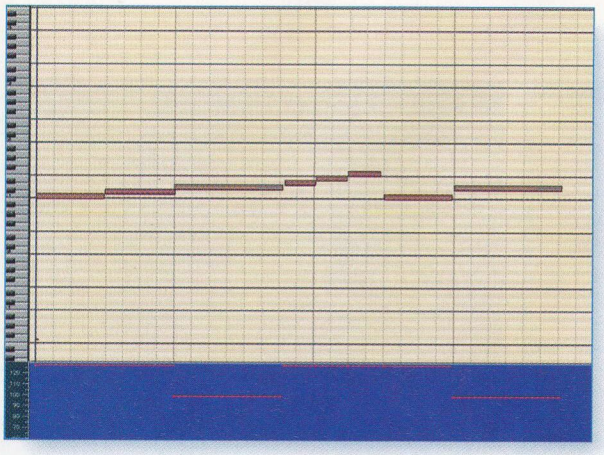
STAGE ONE Classic drum breaks

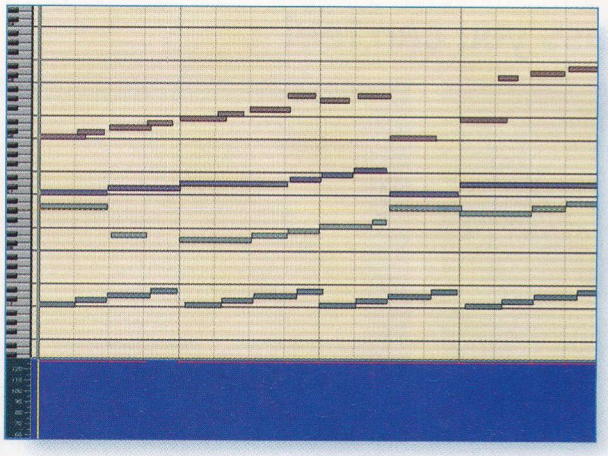


1 Roni Size often uses classic drum breaks, so dig out some of youur favourites, fire up ReCycle! – an essential tool for loop addicts. Don't rely on ReCycle!'s auto detection, though: zoom in and check that the hitpoints are bang on the individual hits. »

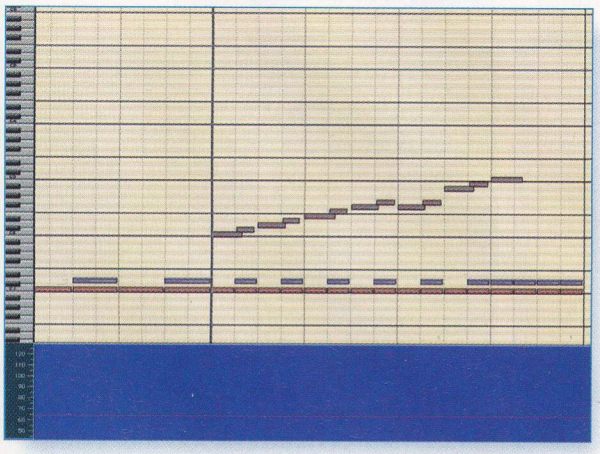
2 Export the sliced loop as a REX file and load it into your sampler, importing the MIDI data into the arrangement. We're using the **Extract sequence and make a new instrument** command in Logic's EXS24, but any sampler will offer a similar function. »



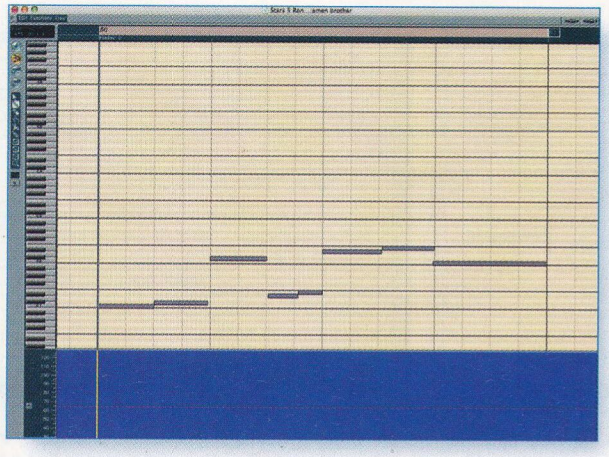
3 Size often leaves breaks sounding natural, so we're not re-programming them too much – just moving some slices to get that vital 'kick, snare, kick, snare' groove. Don't quantise anything else as we want to maintain the subtleties of the original break. »



4 Repeat the process with three or four other breaks, to create the 'wall of drums' associated with d'n'b. Layering allows you to fill out the frequencies without cluttering the groove or relying on heavy processing. »



5 We need a drum roll to intensify the drop. Instead of a clichéd bass drum roll, we're going to spice it up by combining some of the breaks we've got at our disposal. Here, we've used a couple of breaks to make the roll sound authentic. »



6 Size often adds excitement to his drums by throwing in a rough, noisy break at the end of every 16- or 32-bar section. Here we've drawn in a slightly crazier pattern to intensify the end of bar 32 and hype the proceedings up a bit.

Info

High quality samples

We're only going to say this once: don't try and fix it in the mix! Ensure that the samples and breaks you choose already have the sound you want. It's hard to make a poor sample good. If you find yourself piling on EQ, perhaps you should be looking for another sound.

Going soft: Alternatives to Roni's hardware

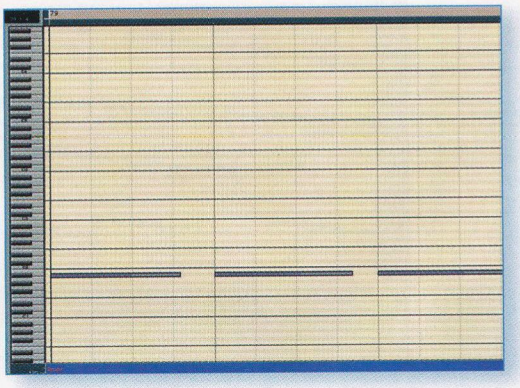
Pro Tools
Roni Size is a big fan of Digidesign's studio staple, but modern sequencers like Cubase and Logic are now so powerful that they pose the question as to whether he should save himself a small fortune and go totally native.

Roland S-760
Size may have finally stopped using this workhorse but sampling is still fundamental to d'n'b production. If you're after a software equivalent, look no further than EXS24, Kontakt and HALion – all are excellent.

Analogue synths
Size's music is littered with fat basses, gurgling FX and analogue synths like the Minimoog. Arturia's virtual Moogs sound frighteningly similar, and there's no chance of woodworm messing with your oscillators...

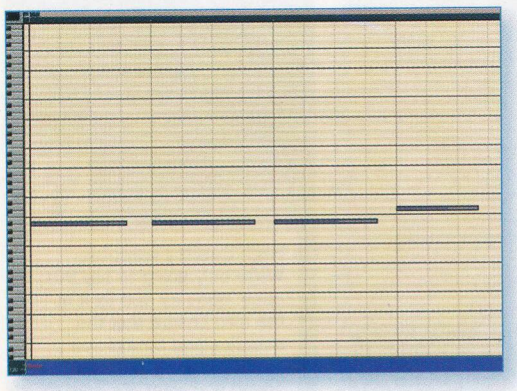
STAGE TWO Bass you can feel

1 Roni uses fat analogue synths for his basslines so load up your best soft synth. We've chosen Logic's ES2. Don't do this on headphones – you need to create a patch that you can feel. This is ours: a low-pass filtered lead to shake your boots. »

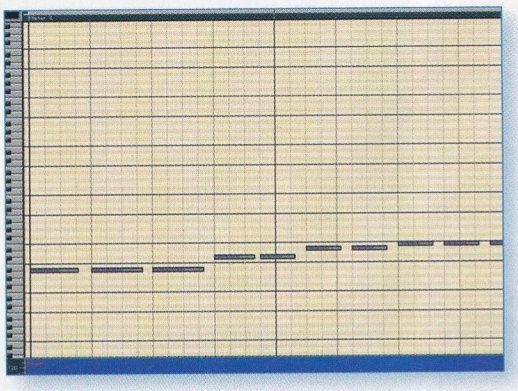


2 Now we've got a decent sub-bass, find a note which you can really feel. It shouldn't be so low that it's just air – find the range where the bass thumps. We found that A♯ and above gave the best tone. »

3 Size relies on bass you can feel and hear. Here's another instance of the ES2 but this time with the filter opened up. We've copied the MIDI pattern from the sub part and put a steep low cut at 120Hz on this channel to let the sub breathe. »



4 Sounds good. OK, it's time to write that killer bassline. You can find your inspiration anywhere but drum 'n' bass heads are renowned for herbal remedies, so get out the green tea. Remember, if you're not vibing now, neither is your bass. »



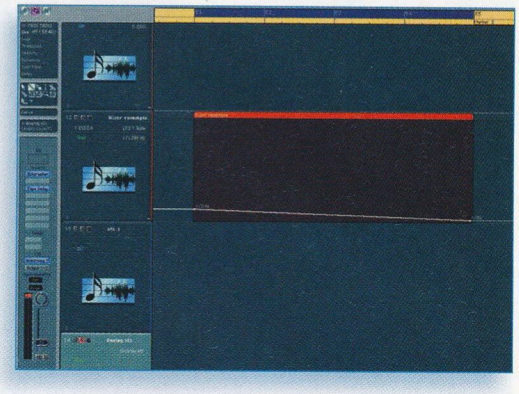
5 Drum 'n' bass sub grooves are dictated by the drums and have to flow. Here we've tried to find a rolling pattern which complements the break. Don't try to get too clever – simple two- or four-bar patterns work best. »

6 Size's basslines develop over the course of a tune and often have a section with a wah-type filter on the higher synth part. Here we've opened the filter attack on the ES2 to get some movement in the bass.

STAGE THREE SFX with attitude

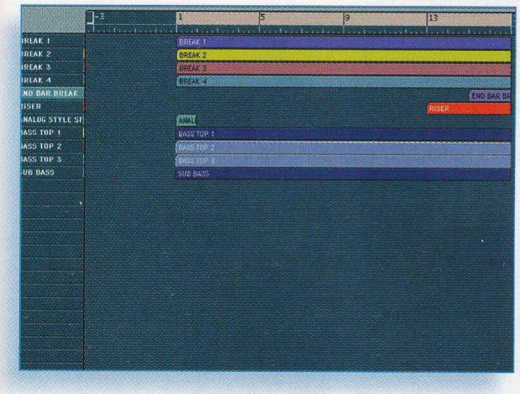
1 Drum 'n' bass tunes are characterised by quirky analogue-style sound effects, rooted in the old reggae sound system days. We've chosen the very capable Arturia minimoog V to recreate a typically off-the-wall analogue sound. »

2 People might dance to the drums and bass but there will often be rising synth sounds to keep things interesting and liven things up. Here we've created a flange type effect using the ES2 and Metaflanger. »

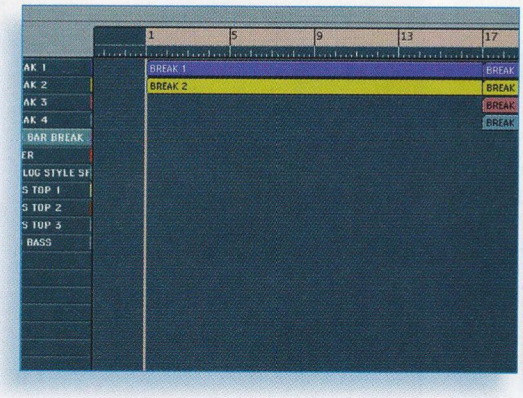


3 To give this sound extra impetus, we've also modulated the LFO speed using Logic's track automation. These types of sound have become somewhat cliché but are still highly effective on a packed dancefloor. »

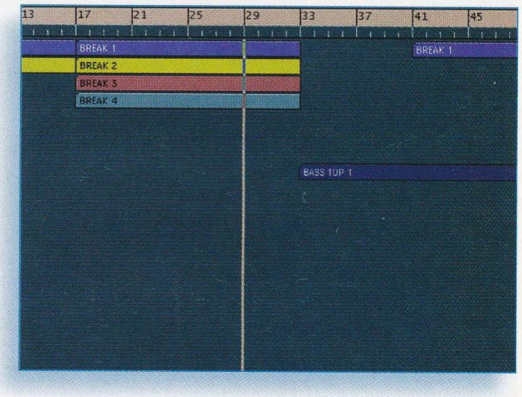
STAGE FOUR Developing the arrangement



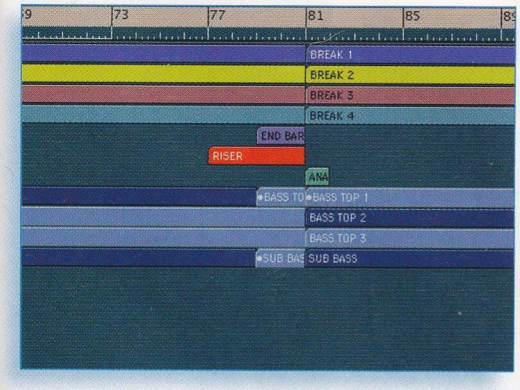
1 A good d'n'b arrangement must work for the DJ and the dancefloor. Roni Size is a master of the intro/drop/breakdown/drop formula. We'll start with all our elements laid out in a 16-bar loop which we're going to develop into the track. »



2 Size likes to start simple, so we'll start with a couple of the breaks that work well together and add to these after 16 bars. DJs think in terms of 16-bar loops, and deviating from this seriously reduces the chance of your track being played. »

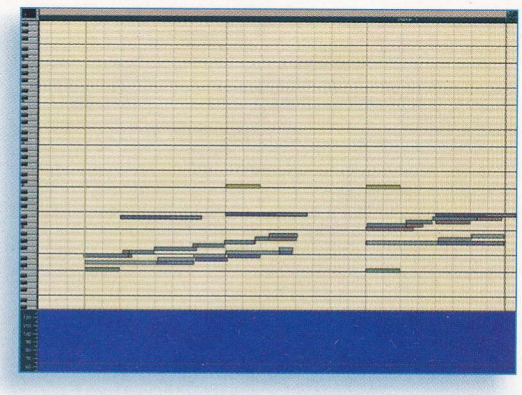


3 In d'n'b, less is often more, so to heighten the effect of the drop we're going to take elements out of the mix. Roni likes to include a section with just the bass before the drop, so we've followed suit and stripped back most of our drums. »



4 Roni Size is a master of basing tracks around one big, club-smashing hook. If the bass is right, simply taking it out for two bars at the end of the 16 will take the place of the traditional musical hook. The lighter parts with dots at the front are muted. »

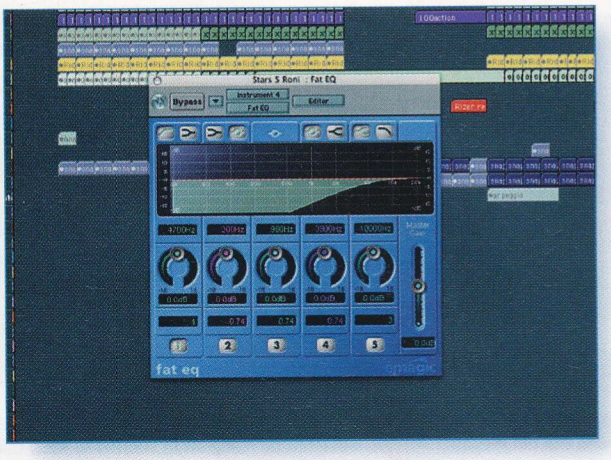
5 We've heightened this effect by unleashing our noisy break at the end of the 16 and then keeping the same bass notes but switching to our other ES2 bass sound. When Roni Size uses this technique, a 'reload' is invariably called for. »



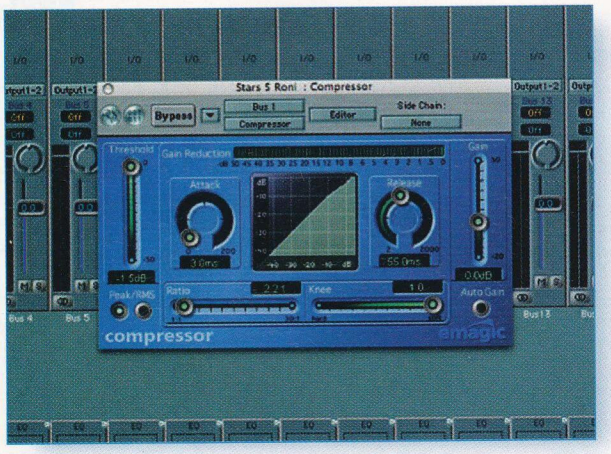
6 To keep the interest and the funk, we've thrown in a bunch of stop/start edits by reprogramming our breaks at certain bars. At this stage we've also placed our sound effects sparingly into the track.

STAGE FIVE Perfecting the mix

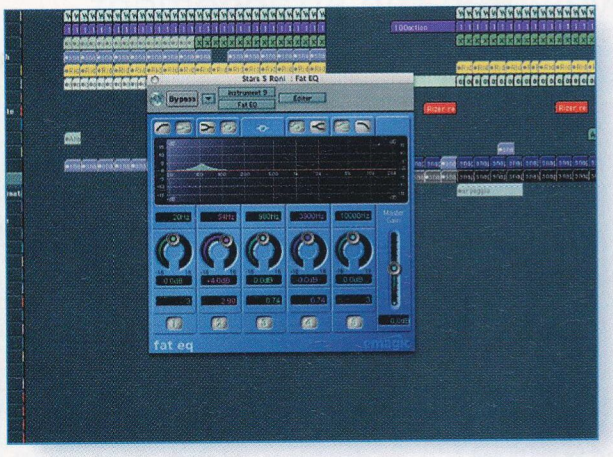
1 To tighten your drums, it's often useful to lengthen the amp envelope attack slightly on less prominent breaks, while experimenting with the decay setting can help on louder breaks. A decay of 172ms with a little sustain is a good starting point. »



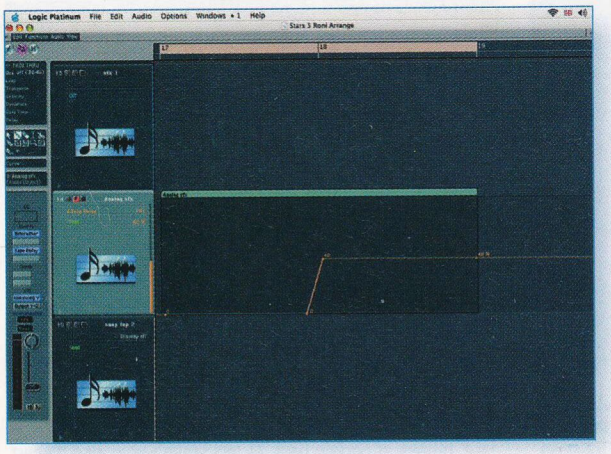
2 To create space within your mix, get rid of any unwanted frequencies. Start by using a low cut on all the breaks, with a low setting (60Hz) on the kick and higher settings on more 'percussion' type parts. Here's the low cut on our tambourine. »



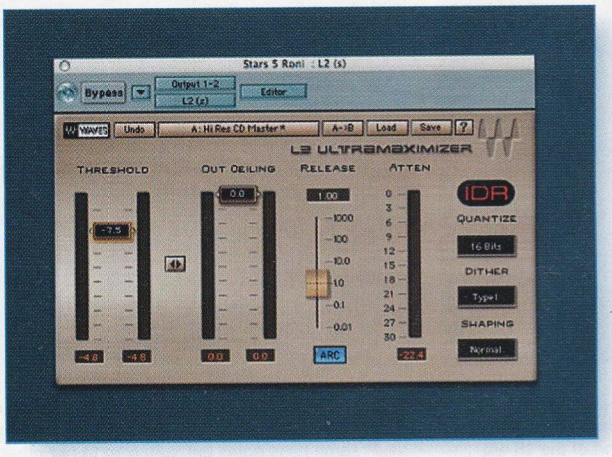
3 Size likes kicks and snares way out at the front of the mix. Get these up, then bus all the drums off to one compressor. With digital compression, low ratios work best – a quick attack to bring out the edge in the drums and medium or auto release. »



4 If your bass patch is good you shouldn't need to do much work. Generally a tight boost between 40 and 60Hz will bring out your bottom end. Compression is a contentious issue on synth bass, so experiment. We've chosen not to use any. »



5 Size doesn't swamp his mixes with effects. We've only used a short reverb on the bass layer to give the illusion of depth. Our drums were left dry. We also automated a tape delay on one of our FX sounds. »



6 Finally, we've put a limiter over the whole mix to squash it together and increase the average output level. As d'n'b records are often played out by DJs before they're mastered and officially released, pre-mastering to increase the level is an important step.

Info

Mono or stereo?
We're not trying to clip your wings, but drum 'n' bass is generally pressed to vinyl, so keep everything below 200Hz in mono – otherwise the cutting lathe simply cannot cut your track. Feel free to pan percussive elements, but it's not going to make or break your mix in a club.

Time to get grimy
Drum 'n' bass is among the most meticulously produced music, so any grit is intentional. Anything you can strap a plug-in across will benefit from grungeing up a little. Bit-crushing, saturation, distortion and overdrive are all great for adding flavour.

JARGON BUSTER
► RELOAD
If you've followed our guide, there's no reason why you shouldn't hear this being screamed in the club by adoring fans as your tune drops. If the crowd call it, the DJ has to pull the record back to the start. That's why – as Roni Size knows – drum 'n' bass is all about the drop.

NEXT MONT
GOLDIE
LOOKIN
CHAIN